



# Weldon Spring Site Air and Water Monitoring



## FACT SHEET

*This fact sheet provides information developed by the former WSSRAP Community Relations Department to provide comprehensive descriptions of key activities that took place throughout the cleanup process at Weldon Spring, Missouri. This site is managed by the U.S. Department of Energy Office of Legacy Management.*

### Air Monitoring

A continuously operating air monitoring network was in place from 1986 through 2000 for the Weldon Spring Site Remedial Action Project (WSSRAP) to measure levels of gamma radiation, radioactive dust particles, radon gas, and asbestos. With remediation of contaminated materials essentially complete and measurements indistinguishable from background, the U.S. Department of Energy (DOE) ceased perimeter and off-site air monitoring as of December 31, 2000.

### Groundwater Monitoring

Groundwater has been routinely monitored at the site since 1986. Separate groundwater monitoring programs were established for the Chemical Plant and Quarry sites because of geographic separation and differences in the hydrogeologic features that influence groundwater flow. Approximately 100 monitor wells and 5 local springs (points where groundwater emerges at the surface) are monitored on a regular basis for chemical and radiological contaminants. Results of groundwater sample analyses are used to assess environmental impacts and evaluate the effectiveness of remedial actions at the site.

In addition to these environmental monitoring programs, a disposal cell groundwater-monitoring program was established and incorporates groundwater, surface water, and cell leachate monitoring during the post-closure period so that a potential breach of the disposal cell liner can be detected early and addressed in a timely manner.

### Surface Water Monitoring

The WSSRAP surface water monitoring network consists of locations at streams and lakes near the former Chemical Plant and the Quarry. Surface water at these locations is monitored quarterly for the presence of uranium.



*Water Monitoring Activities*

Surface water runoff leaving the project site is sampled monthly in accordance with state-issued National Pollutant Discharge Elimination System (NPDES) permits. The samples are analyzed for chemical and radiological contaminants. Because remediation of the site is complete, contaminants in the site runoff have decreased significantly and are at, or near, background levels. Once vegetation becomes established and approval is granted from the state, sampling will no longer be required and these sampling locations can be eliminated from the permit.

On an as needed basis, leachate from the disposal cell Leachate Collection and Removal System is pumped from the sump and transported to the Metropolitan St. Louis Sewer District (MSD) for treatment in its Bissell Point wastewater treatment facility. Samples are collected from the water transported to MSD, and the results are transmitted to MSD as required by the agreement between DOE and MSD.

Results for these sampling events described above are summarized in the Site Environmental Report.